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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,923	04/26/2001	Erin H. Sibley	PD-201008A	2070

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THE DIRECTV GROUP, INC.  
PATENT DOCKET ADMINISTRATION  
CA / LA1 / A109  
2230 E. IMPERIAL HIGHWAY  
EL SEGUNDO, CA 90245

EXAMINER
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USTARIS, JOSEPH G

ART UNIT	PAPER NUMBER
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2623

MAIL DATE	DELIVERY MODE
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/844,923	<b>Applicant(s)</b> SIBLEY, ERIN H.	
	<b>Examiner</b> JOSEPH G. USTARIS	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 29, 2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-12, 18, and 19 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, applicant argues that Hendricks does not disclose an allocated bandwidth having excess bandwidth. However, reading the claims in the broadest sense, Hendricks does disclose that limitation in the claims. Hendricks discloses allocating a frequency spectrum of a communication media (See Fig. 3, 216; col. 10 lines 28-51). Hendricks generates a first portion (See Fig. 3, 216, other digital) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 3, 216, other digital; the other digital portion is less than the combined analog signals, digital compressed signals, other digital, and up-stream) to form an excess bandwidth portion (See Fig. 3, 216; any bandwidth outside of the other digital portion is considered excess bandwidth because it is not being used by the other digital portion).

Applicant also argues that the signals disclosed by Hendricks are not digital television channel signals. However, reading the claims in the broadest sense, Hendricks does disclose that limitation in the claims. Hendricks discloses the signals are used to deliver various services and content to televisions (See Fig. 3). Furthermore, the services and content are in digital form and are delivered to the user in various frequency ranges (e.g. channels) (See col. 10 lines 20-51).

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US006160989A) in view of Eldering et al. (US006704930B1).

Regarding claim 1, Hendricks et al. (Hendricks) discloses a system of broadcasting (See Fig. 1) comprising:

a satellite (See Figs. 1 and 3, satellite);

a network operations center (operations center 202) uplinking electronic content (program signals) to said satellite (See Figs. 1 and 3; col. 5 lines 6-16 and col. 10 lines 1-51);

a terrestrial over-the-air digital broadcast center receiving said electronic content from said satellite (See Figs. 1 and 3, headend 208; col. 7 lines 11-34), generating an over-the-air digital television channel signal over a first portion (See Fig. 3, 216, other digital; col. 7 lines 29-34, Hendricks discloses the use of cellular networks for a delivery system wherein cellular networks wirelessly transmit television services/content via radio transmissions through the air or "over-the-air") of an allocated frequency spectrum (See Fig. 3, 216; col. 10 lines 28-51, the allocated frequency spectrum total bandwidth includes analog signals, digital compressed signals, other digital, and up-stream) so that the first portion is less than the total bandwidth (See Fig. 3, 216, other digital; the other digital portion is less than the combined analog signals, digital compressed signals, other digital, and up-stream) to form an excess bandwidth portion (See Fig. 3, 216; any bandwidth outside of the other digital portion is considered excess bandwidth because it is not being used by the other digital portion) and inserting digital over-the-air electronic content (See Fig. 3, 216, digital compressed signals; col. 7 lines 29-34) corresponding to the electronic content (program signals) into the excess bandwidth portion (See Fig. 3, 216; the bandwidth outside of the other digital portion); and

a user appliance receiving said electronic content (See Fig. 1, 220).

As discussed above, Hendricks discloses allocating a frequency spectrum for the whole communication media.

However, Hendricks does not explicitly disclose allocating a frequency spectrum for a digital television channel having a total bandwidth.

Eldering et al. (Eldering) discloses a digital television system. Eldering discloses allocating a frequency spectrum for a digital television channel having a total bandwidth (See Fig. 1; col. 3 lines 6-24). Eldering also discloses generating an over-the-air digital television channel signal over a first portion (See Fig. 1, program 1) of the allocated frequency spectrum so that the first portion is less than the total bandwidth (See Fig. 1, program 1 bandwidth is less than the total bandwidth of the channel) to form an excess bandwidth portion (See Fig. 1, any bandwidth outside of the program 1 bandwidth is considered excess bandwidth because it is not being used by program 1) and inserting digital over-the-air electronic content (See Fig. 1, programs 2-7) into the excess bandwidth portion (See Fig. 1; the bandwidth outside of program 1 bandwidth). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks to allocate a frequency spectrum for a digital television channel having a total bandwidth and generate an over-the-air digital television channel signal over a first portion of the allocated frequency spectrum so that the first portion is less than the total bandwidth to form an excess bandwidth portion and inserting digital over-the-air electronic content into the excess bandwidth portion of the channel, as taught by Eldering, in order to provide a system that efficiently utilizes the bandwidth available in a digital channel between the headend and the user's equipment (See Hendricks col. 3 lines 20-22 and Eldering col. 1 lines 46-49).

Regarding claim 2, as disclosed in claim 1 rejection, Hendricks discloses a satellite (stratospheric platform) communicates (coupled) with the cable headend (over the air broadcast center).

Regarding claim 3, Hendricks discloses that one of the transmission media can be a cellular network (See column 7 lines 29-34), which inherently includes a “cell tower”.

Regarding claim 4, Hendricks discloses different types of transmission media (e.g. cellular networks) to the home and suggests that similar technology can be used interchangeably (column 7, lines 29-34). However, Hendricks does not explicitly disclose a TV broadcast tower.

Official Notice is taken that it is well known in the art that TV broadcast towers are used as a transmission scheme. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks in view of Eldering to include a TV broadcast tower in order to provide more versatility, options of transmission, and robustness of transmission in case of malfunction by one scheme.

Regarding claims 5 and 6, Hendricks discloses both digital audio and video (See column 5 lines 6-16).

Regarding claim 7, the set top terminals or “user appliance” is “fixed” (See Hendricks Fig. 1).

Claim 9 contains the limitations of claim 1 (wherein the system performs the method) and is analyzed as previously discussed with respect to that claim.

Claim 10 contains the limitations of claims 2 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 11 contains the limitations of claims 3 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 12 contains the limitations of claims 4 and 9 and is analyzed as previously discussed with respect to those claims.

Regarding claim 18, the user appliance receives the electronic content (program signals) without receiving the digital channel signal (See Hendricks Fig. 3, 216, other digital) (See Hendricks col. 12 lines 44-57; Hendricks discloses that the set top terminal can only demultiplex, extract, and decompress a single channel at a time. Therefore, if the set top terminal is tuned to a program signal (digital compressed signals), then the set top terminal does not receive the digital channel signal (other digital)).

Claim 19 contains the limitations of claims 18 and 9 and is analyzed as previously discussed with respect to those claims.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US006160989A) in view of Eldering et al. (US006704930B1) as applied to claim 1 above, and further in view of Owa et al. (US006711379B1).

Hendricks in view of Eldering does not disclose that the “user appliance is mobile”.

Owa et al. (Owa) discloses a digital broadcasting system and terminal. Owa discloses mobile receiving terminals that can receive broadcasts from various sources



(See Figs. 1, 23, and 24; col. 7 lines 21-35). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Hendricks in view of Eldering to include mobile receiving terminals or “mobile user appliance”, as taught by Owa, in order to expand the capabilities of the system thereby making the system more convenient for the user by enabling the user to roam freely with the mobile terminal (See col. 1 lines 26-45).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH G. USTARIS whose telephone number is (571)272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph G Ustaris/  
Primary Examiner, Art Unit 2623